

DETAILED ESTIMATE



**Name of Work: Construction of Market Shed for PRIs in Assam
under Thirteenth Finance Commission.**

Estimated Amount: ₹25, 00,000.00
(Rupees twenty five lakhs) only

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Name of work : Construction of market shed at _____ under SGSY for the year 2011-12

Name of District : I
Estimated Cost : Rs. 25,00,000.00

REPORT

This estimate amounting to Rs. 25,00,000.00 (Rupees Twenty Five Lakhs) only has been prepared by the Junior Engineer, _____ to show the probable cost for Construction of market shed at Ramesuburi Market under SGSY for the year 2011-12.

The following provision are provided in this estimate

- 1/ Construction of Market shed
- 2/ Earth filling

In the estimate rates are accepted as per Schedule of Rate for P.W.D. Building for all divisions under Assam P.W.D. 2010-11.

All Work will be carried out as per general specification current in the state of Assam.


A.P.O (T)
GOALPARA ZILA PARSAD

NAME OF SCHEME: Construction of market shed at
year 2011-12

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under SGSY for the

ABSTRACT

1 Cost of Market Shed	Rs	18,07,438.37
2 Cost of Earth Filling	Rs	9,42,775.68
Total =		Rs. 27,50,212.05
Deduction 10% for Contractor's Profit =		Rs. 2,75,021.21
Total =		Rs. 24,75,190.84
Add 1% for contingency =		Rs. 24,751.91
Grand Total =		Rs. 24,99,942.75
Say, Rs.		25,00,000.00
(Rupees Twenty Five Lakhs) Only		

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DETAILED ESTIMATE

Name of work - Construction of market shed at Ramesubun Market under SGSY for the year 2011-12

Earth work in excavation for foundation trenches of walls, retaining walls, footings of columns, steps and septic tank etc. including refilling (return filling) the quantity as necessary after completing of work, breaking clods in return filling dressing, watering and ramming etc and removal of surplus earth with all lead & lift as directed and specified in following classification of work including bailing out water where necessary.

Column	31 x 1.00 x 1.00 x 1.30 =	40.30 m ³
	31 x 0.90 x 0.90 x 1.00 =	25.11 ..
Under Wall	4 x 18.00 x 0.30 x 0.75 =	16.20 ..
	2 x 13.00 x 0.30 x 0.75 =	5.85 ..
	2 x 16.60 x 0.30 x 0.75 =	7.47 ..
	2 x 16.60 x 0.30 x 0.75 =	7.47 ..
	31 x 2.10 x 0.30 x 0.75 =	14.65 ..
	4 x 3.30 x 0.30 x 0.75 =	2.97 ..
		<u>Total = 120.020 m³</u>

(A) Up to depth of 2.0 m below the existing G.L.

(a) In Ordinary Soil:

@ Rs 64.67 / Cum - - - Rs 7,761.69

(2)4.1.1 Providing brick work soiling in foundation and under floor with stone / best quality picked jhama brick, sand packed and laid to level and in panel after preparing the subgrade as directed including all labour and materials and if necessary dewatering, complete.

Column	31 x 1.00 x 1.00 =	31.00 m ²
	31 x 0.90 x 0.90 =	25.11 ..
Under Wall	4 x 18.00 x 0.30 =	21.60 ..
	2 x 13.00 x 0.30 =	7.80 ..
	2 x 16.60 x 0.30 =	9.96 ..
	2 x 16.60 x 0.30 =	9.96 ..
	31 x 2.10 x 0.30 =	19.53 ..
	4 x 3.30 x 0.30 =	3.96 ..
Floor	24 x 2.20 x 1.90 =	100.32 ..
	2 x 1.90 x 1.90 =	7.22 ..
	2 x 2.70 x 1.90 =	10.26 ..
Ramp Passage	4 x 1.50 x 0.90 =	5.40 ..
	1 x 20.00 x 1.50 =	30.00 ..
	1 x 16.50 x 1.50 =	24.75 ..
	<u>Total = 306.87 m²</u>	

@ Rs 286.37 / Sqm - - - Rs 87,878.36

(3)2 1.1 Plain cement concrete works with coarse aggregate of sizes 13mm to 32 mm in foundation bed for footing, steps, walls, brick works etc. as directed and specified including dewatering if necessary, and curing complete (Shuttering works where necessary shall be measured and paid separately.) (1:3:6)

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Col Footing	31 x 1.00 x 1.00 x 0.075 =	2.325 m ³
	11 x 0.90 x 0.90 x 0.075 =	1.883 "
Under Wall	4 x 18.00 x 0.30 x 0.075 =	1.620 "
	2 x 13.00 x 0.30 x 0.075 =	0.585 "
	2 x 16.60 x 0.30 x 0.075 =	0.747 "
	2 x 16.60 x 0.30 x 0.075 =	0.747 "
	31 x 2.10 x 0.30 x 0.075 =	1.465 "
Ramp	4 x 3.30 x 0.30 x 0.075 =	0.297 "
	4 x 1.50 x 0.90 x 0.075 =	0.405 "
	Total =	10.074 m ³

@ Rs 3733.63 / Cum - - Rs 37,612.59

(4) (k) (i) Supplying, fitting and fixing in position reinforcement bars conforming to relevant I.S. code for R.C.C. work / R.B. walling including straightening cleaning cutting bending to proper shapes and length as per details, supplying and binding with 20 G annealed black wire and placing in position with proper blocks, supports chairs, spacers etc. complete (upto 1st floor level)

Column 12mm Φ	31 x 4 x 5.10 =	632.40 Rm
	31 x 4 x 3.80 =	471.20
Post plate 12mm Φ	2 x 4 x 20.50 =	164.00 "
	2 x 4 x 15.10 =	120.80 "
Total =		1388.40 Rm
		12.36 Qntl.
Column Jali 10mm Φ	31 x 2 x 7 x 1.00 =	434.00 Rm
	31 x 2 x 6 x 0.90 =	334.80 "
	Total =	
		4.77 Qntl.
Stirrups Column 6mm	31 x 8 x 0.85 =	210.80 Rm
	31 x 25 x 0.84 =	651.00 "
	31 x 6 x 0.85 =	158.10 "
	31 x 14 x 0.84 =	364.56 "
	Post plate	2 x 133 x 0.70 =
2 x 100 x 0.70 =		140.00 "
Total =		1710.66 Rm
		3.76 Qntl.

(b) ISI approved super ductile TMT Bar (i) TATA/SAIL - 17.12 Qntl.
 @ Rs 5290.41 / Qntl - - Rs 90,589.38

(c) ISI approved - M.S. Rod. - 3.76 Qntl.
 @ Rs 5241.78 / Qntl. - - Rs 19,727.19

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(6)2.1 Providing form work of ordinary timber planking so as to give a rough finish including centering, shuttering, strutting and propping etc. height of propping and centering below supporting floor to floor to ceiling not exceeding 4.0 m and removal of the same for in situ reinforced concrete and plain concrete work.

1. Foundation, footings, bases of columns, pile cap, raft and mass concrete works etc. (i) Using 25mm thick plank

Column	31 x 4 x 1.00 x 0.10 =	12.40 m ²
	31 x 4 x 0.23 x 1.50 =	42.78 "
	31 x 4 x 0.90 x 0.10 =	11.16 "
	31 x 4 x 0.23 x 1.20 =	34.22 "
	Total =	100.56 m ²

@ Rs 157.05 / Sqm

Rs 15,792.95

2. Columns, pillars, posts & strut (i) Using 25mm thick plank

Column	31 x 4 x 0.20 x 3.30 =	81.84 m ²
	31 x 4 x 0.15 x 2.30 =	42.78 "
	Total =	81.84 m ²

@ Rs 233.94 / Sqm

Rs 19,145.65

3. Sides and soffits of beams, beam haunching, cantilever, girders, bressumers lintels and horizontal ties. (i) Using 25mm thick plank

Post Plate	2 x 2 x 0.20 x 20.00 =	16.00 m ²
	2 x 2 x 0.20 x 15.00 =	12.00 "
	Total =	28.00 m ²

@ Rs 179.52 / Sqm

Rs 5,026.56

(6)2.2.1 Providing & laying reinforcement cement concrete works in prop 1:2:4 (1 cement : 2 coarse sand : 4 coarse aggregate 20mm down) including dewatering if necessary and curing complete but excluding cost of form work and reinforcement for reinforced cement concrete work. (form work and reinforcement will be measured and paid separately)

(a) In Sub-Structure up to plinth level

Column Base	31 x 1.00 x 1.00 x 0.10 =	3.100 m ³
Column	31 x 0.23 x 0.23 x 1.50 =	2.460 "
	31 x 0.90 x 0.90 x 0.10 =	2.511 "
	31 x 0.23 x 0.23 x 1.20 =	1.968 "
	Total =	5.560 m ³

@ Rs 4734.15 / Cum

Rs 26,321.87

(b) In Super Structure from plinth level up to 1st floor level.

Column	31 x 0.20 x 0.20 x 3.30 =	4.092 m ³
	31 x 0.15 x 0.15 x 2.30 =	1.604 "
Post Plate	2 x 0.15 x 0.20 x 20.00 =	1.200 "
	2 x 0.15 x 0.20 x 15.00 =	0.900 "
	Total =	7.796 m ³

@ Rs 4875.71 / Cum

Rs 38,011.04

W)

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(7) Brick work in cement mortar with 1st class brick including racking out joints and plastering of one side, and curing complete as directed in sub-structure up to plinth level. Prop. 1:-

Wall	4 x 18.00 x 0.23 x 1.50 =	24.840 m ²
	2 x 13.00 x 0.23 x 1.50 =	8.970 "
	2 x 16.60 x 0.23 x 1.50 =	11.454 "
	2 x 16.60 x 0.23 x 1.50 =	11.454 "
Ramp	31 x 2.10 x 0.23 x 1.50 =	22.460 "
	8 x 0.9 x 0.23 x 1.20 =	1.987 "
	4 x 1.5 x 0.23 x 0.90 =	1.242 "
	<u>Total =</u>	<u>82.407 m²</u>

@ Rs 4423.20 / Cum

Rs 3,64,502.64

(8) 4.1: 112mm thick 1st class brick nogged wall in cement mortar including racking out joints and curing complete as directed in super structure above plinth up to 1st floor (protruding M.S. Rod / Tor Steel of column to be embedded in cement mortar and will be measured and paid for separately.

Wall	2 x 18.00 x 1.50 =	54.00 m ²
	2 x 13.00 x 1.50 =	39.00 "
	29 x 2.10 x 1.50 =	91.35 "
	<u>Total =</u>	<u>184.35 m²</u>

@ Rs 518.62 / Sqm

Rs 95,807.60

(9) 6.2: 10mm thick cement plaster in single coat on fair side of brick / concrete wall for interior plastering upto 1st floor level including arrises, internal rounded angle not exceeding 80mm in girth and finished even and smooth including curing complete as directed. (c) In cement mortar 1:6.

Wall	2 x 18.60 x 1.50 =	55.80 m ²
	2 x 14.40 x 1.50 =	43.20 "
	29 x 2.10 x 1.50 =	91.35 "
Column	31 x 0.80 x 1.60 =	39.68 "
	31 x 0.60 x 0.60 =	11.16 "
	<u>Total =</u>	<u>241.19 m²</u>

@ Rs 76.48 / Sqm

Rs 18,446.21

(10) 6.2.2: 15mm thick cement plaster in single coat on rough side of single or half brick wall for interior plastering upto 1st floor level including arrises, internal rounded angle not exceeding 80 mm in girth and finished even and smooth including curing complete as directed. (c) In cement mortar 1:6.

Wall	2 x 18.60 x 1.50 =	55.80 m ²
	2 x 14.40 x 1.50 =	43.20 "
	29 x 2.10 x 1.50 =	91.35 "
	<u>Total =</u>	<u>190.35 m²</u>

@ Rs 95.10 / Sqm

Rs 18,102.29

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Providing fitting, hoisting and fixing of roof trusses including purlins fabricated using M.S. track tubes conforming to relevant I.S. code as per approved design and drawings including providing M.S. cleats, base plates, bolts and nuts and one coat of red oxide Zinc Chromate primer and two coats of approved enamel paints complete including fitting necessary cleats etc for fixing ceiling joists as per design and drawings as directed.

		L	Kg/m	
Tie (76.1 OD)	1 x	16 x	3.60 x 5.80 =	519.680 Kg
Rafter (76.1 OD)	2 x	16 x	3.60 x 5.80 =	668.160 ..
Purlin (42.4 OD)	4 x	4 x	17.25 x 2.59 =	714.840 ..
Tie inclined (33.7 OD)	2 x	16 x	0.80 x 2.01 =	51.456 ..
	2 x	16 x	0.95 x 2.01 =	61.104 ..
	2 x	16 x	1.16 x 2.01 =	74.611 ..
Struts (33.7 OD)	2 x	16 x	0.35 x 2.01 =	22.512 ..
	2 x	16 x	0.68 x 2.01 =	43.738 ..
	2 x	16 x	0.95 x 2.01 =	61.104 ..
	1 x	16 x	1.30 x 2.01 =	41.808 ..
Gusset plate (10 mm)	2 x 16 x	3 x	0.08 (Area) x 78.50 =	602.880 ..
	2 x 16 x	2 x	0.120 (Area) x 78.50 =	602.880 ..
	2 x	8 x	1 x 0.123 (Area) x 78.50 =	154.488 ..
	2 x	8 x	1 x 0.170 (Area) x 78.50 =	213.520 ..
	2 x 16 x	1 x	0.070 (Area) x 78.50 =	175.840 ..
Base plate (12 mm)	1 x 16 x	1 x	0.023 (Area) x 94.20 =	33.912 ..
			Total =	4042.533 Kg
				40.43 Qtnl.

@ Rs 5875.00 / Qtnl - - - - - Rs 2,37,498.80

(12) Providing galvd. iron ridging of TATA Shaktee /SAIL including supplying and fixing necessary galvd. screws / washers etc. complete as directed. (C) 0.60 mm thick, 150mm laping

2 x 17.25 = 34.50 Rm

(j) Rs 126.65 / Rm - - - - - Rs 4,369.43

(13) Providing corrugated galvd. Iron sheet roofing of TATA Shaktee /Sail including fitting and fixing necessary galvd. J or L hooks, bolts and nuts 8mm dia with bitumen washer 25mm dia x 3mm thick 1nd 1.6 mm thick limpet washer complete excluding cost of roof truss, purlin etc. (roof trusses and purlin etc. to be measured and paid seperately). (d) 0.63 mm thick.

2 x 3.60 x 19.40 = 139.68 m²

2 x 3.60 x 16.10 = 115.92 ..

Total = 255.60 m²

@ Rs 425.09 / Sqm - - - - - Rs 1,08,653.00

(14) Providing, fitting and fixing A.C. building board in ceiling with necessary nails wood screws including 1st class local wood 50 mm x 12 mm (hollock / borsum / sundi) beading including painting two coats to timber beads complete as directed (ceiling joist to be measured and paid separately). (6 mm thick)

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15 x	5.60 x 20.00 =	672.00 m ²
2 x	5.60 x 14.50 =	162.40 "
Total =		834.40 m ²

@ Rs 292.15 / Sqm

Rs 2,43,769.95

13.2.2 Earth/Sand filling in plinth in layer not more than 150mm thick including necessary carriage, watering, raming etc. complete as directed and specified. Including payment of land compensation, Forest Royalty, Sales Tax and other duties and taxes as may be necessary. (C) With river sand or silt (predominantly non plastic) by truck carriage including loading and unloading.

Floor	24 x 2.20 x 1.90 x 0.50 =	100.320 m ³
	2 x 1.90 x 1.90 x 0.50 =	7.220 "
	2 x 2.70 x 1.90 x 0.50 =	10.260 "
Ramp	4 x 1.50 x 0.90 x 0.20 =	5.400 "
Passage	1 x 20.00 x 1.50 x 0.20 =	30.000 "
	1 x 16.50 x 1.50 x 0.20 =	24.750 "
Total =		177.950 m ³

@ Rs 322.75 / Cum

Rs 57,433.36

(16) 65mm thick cement concrete floor consisting of 50mm under layer of cement concrete 1 : 3 : 6 (1 cement : 3 coarse sand : 6 coarse agg. Of size 25mm down) and 15mm thick wearing layer in cement concrete 1 : 1 : 2 (1 cement : coarse sand : 2 coarse agg. Of size 10mm down laid in panels and finished with a floating coat of neat cement finish (using cement slurry for board @ 2.75Kg Per sq.m of floor area) including curing etc. complete as directed.

Floor	24 x 2.20 x 1.90 =	100.32 m ²
	2 x 1.90 x 1.90 =	7.22 "
	2 x 2.70 x 1.90 =	10.26 "
Ramp	4 x 1.50 x 0.90 =	5.40 "
Passage	1 x 20.00 x 1.50 =	30.00 "
	1 x 16.50 x 1.50 =	24.75 "
Total =		177.95 m ²

@ Rs 449.48 / Sqm

Rs 79,964.97

(17) (a) Colour washing with lime on wall surface (two coats) over and including a priming coat of white washing to give an even shade after thoroughly brooming the surface to remove all dirt, dust, mortar drops and other foreign matter.

(Building -A+B) From SI No.- 9 & 10 = 431.54 m²
@ Rs 21.40 / Sqm

Rs 9,234.96

Add for Services =

Total = Rs 15,85,470.50

1/ For internal electrification @ 9% of Civil Cost Rs. 1,42,692.35

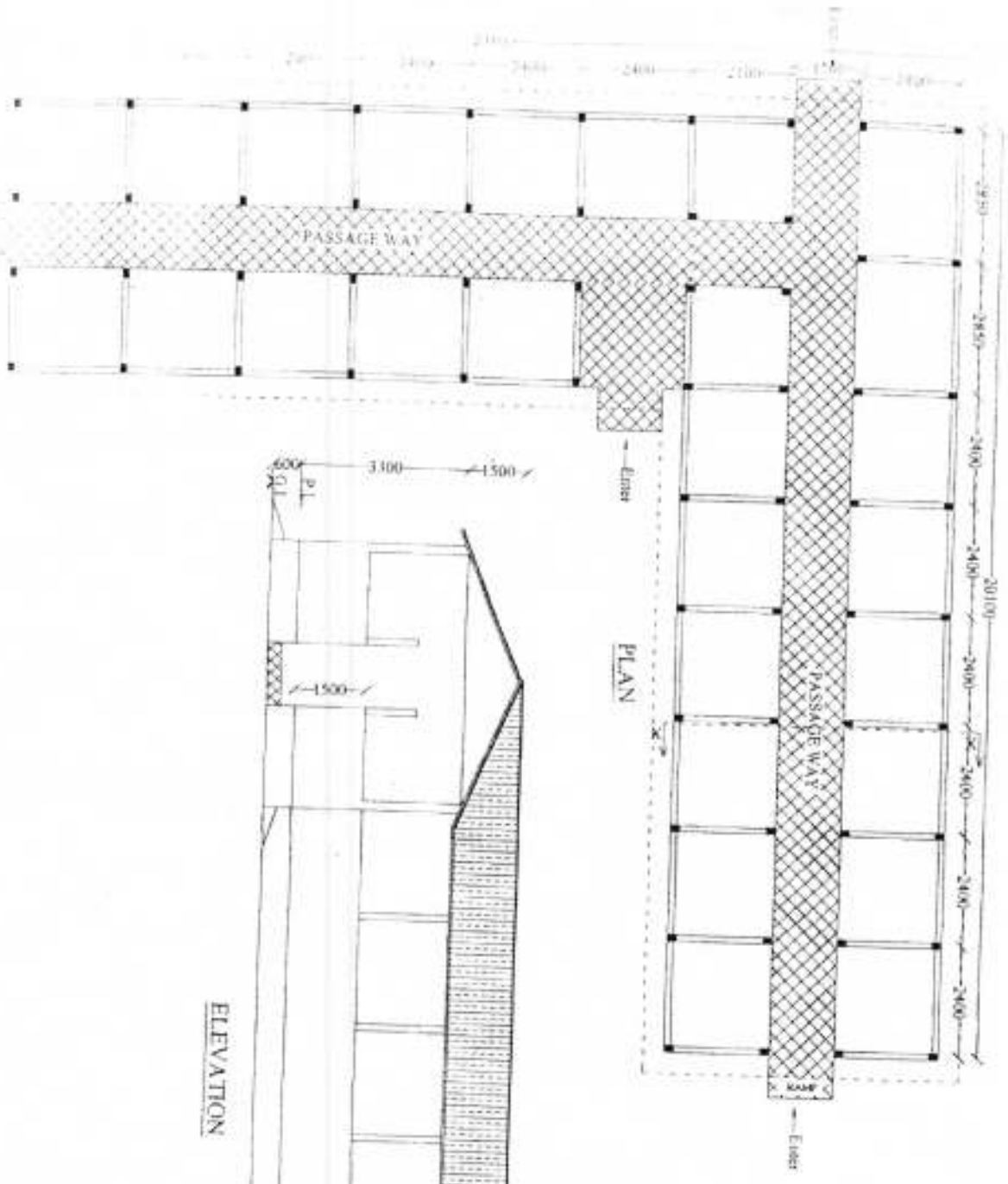
2/ For normal preparation of site @ 1% of Civil Cost Rs. 15,854.71

3/ For external electrification with substation and L.T./H.T. line @ 4% of Civil Cost Rs. 63,418.82

Total = Rs. 18,07,436.37

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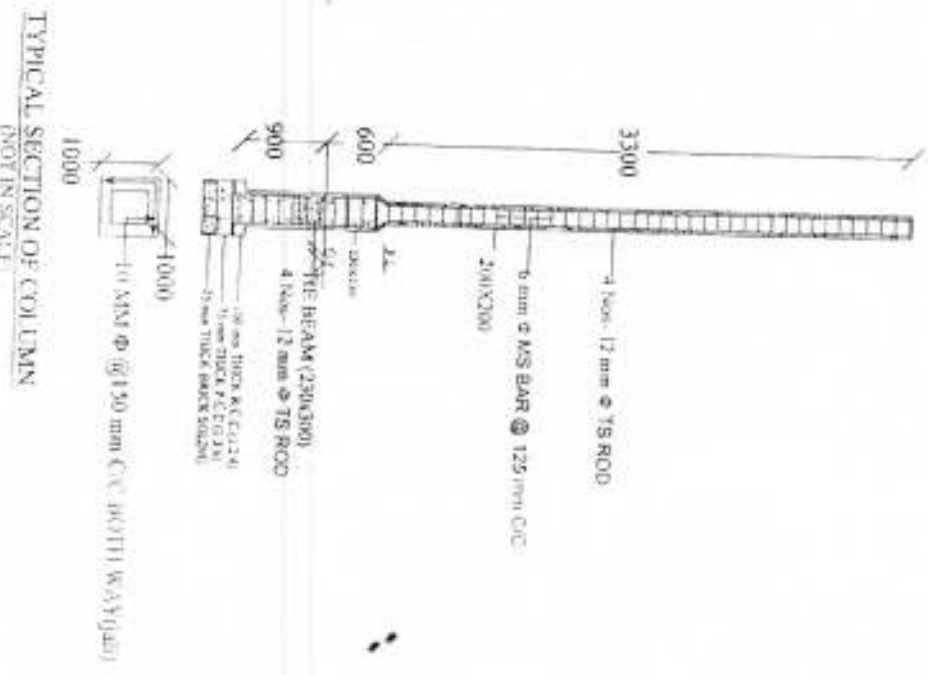
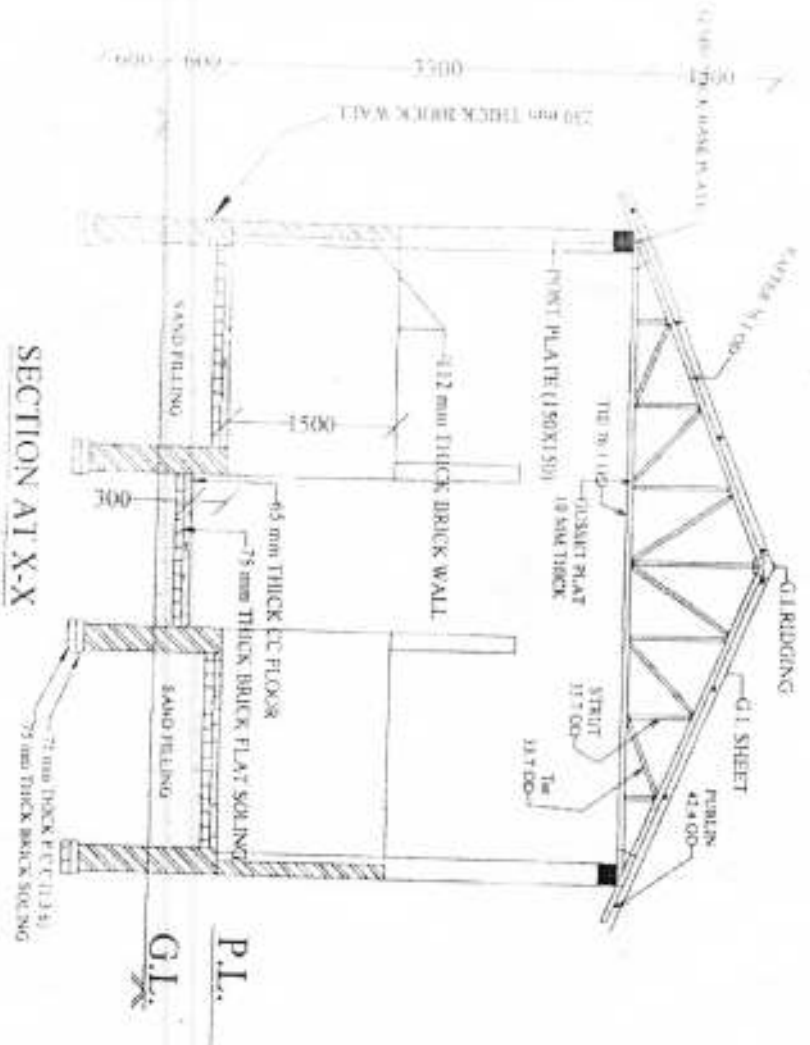
AN ELEVATION OF MARKET SHED (SCALE=1:130)



GOALPAPER 211 A PAPER
 400 (M)
 1/10

DIFFERENT SECTIONS OF MARKET SHED (NOT IN SCALE)

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APD (M)
 COLPARK, SH. A. PAPERNOAD